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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

701126

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Application Number

10/004,154

Filed

10/30/01

First Named Inventor

Heinrich Bauschulte

Art Unit

3722

Examiner

Willmon Fridie

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

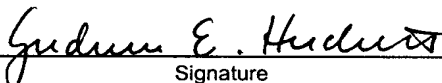
I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest.
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)

☒ attorney or agent of record.
Registration number 35747

☐ attorney or agent acting under 37 CFR 1.34.
Registration number if acting under 37 CFR 1.34 _____


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11/14/2007

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☐ *Total of _____ forms are submitted.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Heinrich Bauschulte et al.
Serial No: 10/004,154
Filed: 10/30/2001
Title: Cutting or Breaking Tool as well as Cutting Insert for the Latter
Examiner: Willmon Fridle Jr.
Art Unit: 3722

Commissioner for Patents

Alexandria, VA 22313-1450

ARGUMENTS ACCOMPANYING
PRE-APPEAL BRIEF REQUEST FOR REVIEW

Claims 8-28 stand rejected under 35 U.S.C. 103(a) as being unpatentable over *Emmerich* (US 6,019,434).

The examiner argues that the cited reference discloses a cutting insert (20) that can be mounted in a tool holder that can be rotated about its longitudinal axis wherein the cutting insert has an essentially conical tip (22), a transition region, and a foot (40) for connecting with a tool body (10), wherein the transition region has several spatial areas (24) distributed over the periphery and adjoining one another to form spatial and cutting edges. The examiner further states that the spatial areas are curved concavely and inclined so that they enclose an acute angle to the longitudinal axis and that the spatial areas are rounded as they change into the foot (40).

Examiner states that the reference discloses all of the subject matter set forth in the claims except for an even number of spatial areas. The examiner argues that it would have been obvious to a person skilled in the art to use an even number of spatial areas since the mere duplication of the essential working parts involves only routine skill in the art.

Applicant respectfully submits that “**an even number plurality of spatial areas and**

a plurality of cutting edges between the spatial areas” as claimed in the independent claims 8 and 14 drawn to a cutting insert and the independent claims 16 and 23 drawn to a lathe chisel with a cutting insert cannot be obvious in view of the cited reference to *Emmerich* because the issue is not a mere duplication of the essential working parts but the teaching of the cited reference in connection with the “working parts”.

Even though the general configuration of the bit of *Emmerich* is similar to that of the present invention, the cited reference discloses **an odd number of side faces 24** (the side faces are equivalent to the spatial areas as claimed); see Abstract of *Emmerich*; see also col. 2, lines 29-30, of *Emmerich*. Also, col. 3, lines 2-7, of *Emmerich* sets forth that there are at least five faces and preferably nine faces and that the odd number of faces provides a tip having no pairs of opposed faces 24.

If a person skilled in the art were contemplating using an even number of faces, the person skilled in the art would be discouraged from even trying as the cited reference clearly **teaches away from using an even number of side faces**. The Abstract and the text portion of col. 1, lines 38-43, set forth that:

*“The **odd number of side faces** create an unbalanced loading on the bit when it engages the surface to be mined, excavated or cut and **cause the bit to rotate** within a mounting block in which the shank is rotatably received **to reduce the wear on and more evenly wear the bit**.”* (emphasis added).

More advantages of the odd number of faces are discussed in col. 1, lines 51-67, of *Emmerich*, i.e., reduced wear; even (uniform) wear; self-sharpening action; extended service life.

It is also stressed that the odd number of faces 24 leads to the tip 2 being unbalanced at all times leading to an uneven loading of the tip 20 as it engages the surface to be machined and causing the bit to rotate (col. 3, lines 7-11). Even more importantly, the reference sets forth that it is undesirable to have an even number of faces (col. 3, lines 11-14):

*“If the tip were formed with an **even number of faces**, each face would have an opposed parallel face providing **a balanced bit which would not rotate effectively, if at all, in use**.”* (emphasis added).

Therefore, the cited reference **clearly teaches away from providing an even number of faces on the bit**.

Examiner's attention is respectfully directed to **MPEP 2141.02 Differences Between Prior Art and Claimed Invention** and in particular the discussion under heading **VI. PRIOR ART MUST BE CONSIDERED IN ITS ENTIRETY, INCLUDING DISCLOSURES THAT TEACH AWAY FROM THE CLAIMS:**

"A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984)."

Examiner's attention is respectfully directed also to **MPEP 2145 Consideration of Applicant's Rebuttal Arguments** where under the heading **D. References Teach Away from the Invention or Render Prior Art Unsatisfactory for Intended Purpose** it is stated that:

"In addition to the material below, see MPEP §§ 2141.02 (prior art must be considered in its entirety, including disclosures that teach away from the claims) and MPEP §§ 2143.01 (proposed modification cannot render the prior art unsatisfactory for its intended purpose or change the principle of operation of a reference)."

Moreover, it is set forth in **MPEP 2145** that:

- **"1. The Nature of the Teaching Is Highly Relevant"**

"A prior art reference that "teaches away" from the claimed invention is a significant factor to be considered in determining obviousness; however, "the nature of the teaching is highly relevant and must be weighed in substance."

...

- **"3. Proceeding Contrary to Accepted Wisdom Is Evidence of Nonobviousness"**

"The totality of the prior art must be considered, and proceeding contrary to accepted wisdom in the art is evidence of nonobviousness. *In re Hedges*, 783 F.2d 1038, 228 USPQ 685 (Fed. Cir. 1986)."

...

"Furthermore, "[k]nown disadvantages in old devices which would naturally discourage search for new inventions may be taken into account in determining

obviousness." *United States v. Adams*, 383 U.S. 39, 52, 148 USPQ 479, 484 (1966)."

When looking at the disclosure of *Emmerich*, a person skilled in the art will take away the teaching that an odd number of faces is required in order to have a tip that is unbalanced at all times and is unevenly loaded as it engages the surface to be machined; only this arrangement will cause the bit to rotate (col. 3, lines 7-11). Even more importantly, the reference clearly teaches that it is undesirable to have an even number of faces (col. 3, lines 11-14) because an even number of faces will create "a balanced bit which would not rotate effectively, if at all, in use.", i.e, the bit is inoperative.

Emmerich therefore clearly teaches away from the invention as claimed and discourages a person skilled in the art from even trying to provide a bit with an even number of faces because *Emmerich* teaches that such a bit does not work.

The invention as claimed in claims 8, 14, 16, and 23 is therefore not obvious in view of the cited reference.

Respectfully submitted on November 14, 2007,

/Gudrun E. Hockett/

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